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Problems of Administering a Value-Added Tax
in Developing Countries 1/

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Abstract

During the 1970s and 1980s, many developing countries enacted value-added taxes (VATs) as a part of their fiscal structures. The productivity of this source of revenue has depended in large part on the facility with which the tax can be administered. Single rate VATs have proved easier to administer than those with multiple rates. Exemptions and zero-rating tend to complicate administration. Because small taxpayers are so numerous in developing countries and administrative resources so limited, the treatment of small taxpayers has required special attention. The difficulty of taxing services has led most developing countries to omit all but a few services from the tax base. Administrative constraints are the main reason why the VAT that prevails in developing countries is usually very different from the broad-based and neutral tax discussed in public finance treatises.

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Summary

During the last two decades the major innovation in the tax systems of developing countries has been the introduction of value-added taxes (VAT) extending through the retail level. Such comprehensive VATs are now employed in 22 developing countries. Rates of VAT differ considerably; the standard rate ranges from 5 percent to 25 percent. In some countries the VAT is levied at a single rate, while others apply multiple rates. Although the tax was originally applied to the sale of goods, practically all countries now tax some services. All countries exempt exports, and most also exempt some goods and services intended for domestic consumption. The yield of value-added taxes varies widely, from 0.5 percent of gross domestic product to more than 8 percent. Differences in yield are explained partly by the level of rates, coverage of the tax, and differences in economic structure. The effectiveness of tax administration also helps explain why the tax yields more in some countries than others.

An important requirement for successful VAT administration is to structure the tax to minimize problems of implementation. From the administrative point of view a single rate is highly desirable; if necessary, the VAT can be supplemented with selective consumption taxes to reduce regressivity. Despite initial skepticism about high VAT rates, experience (e.g., in Brazil and Chile) has shown that rates in the neighborhood of 18-20 percent can be enforced. Exemptions complicate VAT administration because the distinction between what is exempt and what is taxed is often tenuous or arbitrary. Nevertheless, distributional objectives have led many countries to exempt basic and nonbasic commodities. Zero-rating, a more complex form of exemption that requires the granting of refunds and therefore burdens the administration, has wisely been limited to exports by most countries. The need to provide special treatment for small businesses under VAT is much more pressing in developing than in industrial countries. Various methods for dealing with small taxpayers are in use, but all methods present technical and practical problems.

Successful introduction of a VAT depends in large measure on whether the country has had previous experience with general sales taxes, the nature of the taxes that the VAT will replace, the lead-in time, and how the VAT is structured in terms of rates, exemptions, and treatment of small taxpayers. The main issues of VAT administration concern identifying taxpayers, processing returns, controlling collections, making refunds, auditing taxpayers, and levying penalties. Once a VAT is in place, administrative constraints tend to distort some of its features. Administrations with insufficient resources frequently overemphasize enforcement efforts among large taxpayers, and restrictive refund practices tend to distort the character of consumption-type VATs. Thus the broad-based and neutral tax discussed in public finance treatises is very different from the VAT prevailing in most developing countries. Administrative constraints are responsible for the difference.

1. Background

During the last two decades the major innovation in the tax systems of developing countries has been the introduction of value-added taxes extending through the retail level. Before 1970 only Brazil and Uruguay among the developing countries had such a tax. Currently, 22 developing countries have a comprehensive VAT extending through the retail level.

The rates and coverage of VAT differ considerably among developing countries. In some it is levied at a single rate, while in others it is applied with multiple rates. The level of the standard rate ranges from 5 to 20 percent. In most developing countries the tax originally was applied mainly to the sale of goods. At present practically all countries tax some services. A few developing countries apply VAT to a broad range of services (e.g., Portugal and Uruguay). Exemptions also vary widely. Most developing countries exempt basic consumer goods such as unprocessed foodstuffs and medicines. Some exempt goods other than necessities. In a few developing countries, such as Chile, exemptions have been greatly curtailed and the scope of the tax correspondingly broadened. The majority of developing countries use zero rating exclusively for exports (see Table 1).

The yield of value-added taxes varies considerably among developing countries. As a fraction of GDP, VAT collections range from less than 0.5 percent to over 8 percent. The ratio of VAT collections to total tax receipts ranges from less than 7 percent to more than 35 percent. Data disclosing what fraction of VAT is collected at the import stage are not available for all countries that apply a VAT, but where such information is available this fraction ranges from approximately 30 to 65 percent. Differences in the coverage of VAT and in rate levels explain part of these variations. Another part is explained by differences in economic structure, including the degree of openness of the economy, the size of the monetary sector, and the degree of concentration of production and distribution.

Aside from these factors, differences in the effectiveness of tax administration also help explain the wide variation in VAT revenue performance among developing countries. This paper attempts to summarize the main features of VAT administration in developing countries, highlighting those aspects that most strongly affect the success with which the tax is implemented.

Table 1. Value-Added Tax Rates and Revenue
Importance in Developing Countries 1/

(countries listed in order by size of VAT revenue as percentage of total tax revenue)

Country	1983 GNP per capita (in US dollars)	Year VAT was introduced <u>2/</u>	VAT rates 1985/86		VAT revenue as percentage of: <u>4/</u>	
			Standard	Other <u>3/</u>	GDP	Total Tax Revenue
Chile	1,870	1975	20	0.5, 33, 35, 50, 90	8.12	37.43
Peru	1,040	1982	6		4.37	31.22
Brazil <u>5/</u>	1,890	1967	17		6.49	28.74
Colombia	1,410	1984	10	0, 4, 6, 20, 35	2.08	27.13
Korea	2,010	1977	10	0, 2, 3.5	4.03	25.07
Madagascar	290	1984	15		2.93	25.06
Guatemala	1,120	1983	7		1.56	24.76
Uruguay	2,490	1968	20	12	4.55	23.49
Turkey	1,230	1985	10	0	3.10	21.90
Mexico	2,240	1980	15	0, 6, 20	3.18	19.71
Costa Rica	1,020	1975	10		3.69	17.42
Argentina	2,030	1975	18	5, 23	1.88	14.89
Ecuador	1,430	1970	10		1.33	12.35
Honduras	560	1976	5	6	1.48	12.23
Haiti	320	1982	10		1.07	11.48
Nicaragua	900	1975	10	25	2.84	10.42
Dominican Republic <u>6/</u>	1,380	1984	6		0.92	9.89
Panama	2,070	1977	5		1.86	9.08
Bolivia	510	1973	5		0.28	6.83
Niger	240	1986	25	15, 35	n.a.	n.a.
Portugal	2,190	1986	16	0, 8, 30	n.a.	n.a.
Taiwan Province of China	2,682	1986	5		n.a.	n.a.

Sources: Tax data from Government Finance Statistics, International Monetary Fund, 1985, and Fund staff information. GNP data for all countries but the Taiwan Province of China from World Bank Atlas; for Taiwan, from The Statesman's Yearbook.

1/ Developing countries are defined here as those with per capita GNP of less than US\$3,000 in 1983. Value-added taxes extend through retail stage in all listed countries.

2/ Dates given are when country introduced a VAT that extends through retail stage. (Some countries had previously had a VAT that terminated at an earlier stage.)

3/ In all listed countries, exports are zero rated. The figure zero appears in the "Other rates" column only if some goods or services sold for domestic consumption are also zero rated.

4/ 1983 data with the exception of Colombia (1984), Dominican Republic (1984), Guatemala (1985), Madagascar (1984), and Turkey (1985). Data for these countries are provisional. VAT rates in 1983 may differ from those given for 1985/86, as for example in Peru, where the rate was 18 percent in 1983.

5/ Rate shown is that of VAT levied by states on intrastate transactions (ICM). In addition, the federal government levies a VAT at import and manufacturing stages, with multiple rates (IPI). Combined yield of these taxes (ICM and IPI) is compared to GDP and to total tax receipts of both federal and state governments.

6/ The law that introduced the VAT extends it through the retail stage. Implementation of the tax among retailers has been suspended by decree until November 1986.

It is important to bear in mind, however, that the diversity of developing countries is reflected in how the VAT is administered. Developing countries that have a VAT range from extremely low per capita incomes to middle income levels. Insofar as income levels reflect the existence of modern business practices and a relatively sophisticated level of tax administration, the problems faced by middle income countries in administering a VAT do not differ markedly from those faced by industrialized countries. On the other hand, administration of a VAT in very low income countries poses problems of quite a different nature.

Some developing countries levy a VAT that extends no further than the import and manufacturing stages. In this paper, my remarks will refer only to the experience of developing countries in which the tax extends through the retail stage.

2. VAT structural features with major administrative implications

Experience in developing countries shows that an important requirement for successful VAT administration is that the tax be structured so as to minimize problems of implementation. Some of the structural features of VAT that affect ease of administration are the number of rates, the scope of exemptions and zero rating, and the treatment of small enterprises.

a. VAT rates

(1) Number of rates

Many industrial countries have tried to make the VAT more progressive by taxing necessities at reduced rates and luxury goods at higher rates. These well-intentioned attempts at redistribution have added materially to costs of administration. In the Netherlands one author comments, "the reduced rate on so-called necessities has led to numerous arbitrary distinctions, litigation, and pressure to apply that rate to other items... Also, the reduced rate substantially increases compliance costs for small firms. In short, it involves a lot of administrative nonsense and pointless distortions of consumer choice." ^{1/} Similarly, the Irish Commission on Taxation pointed to the impossibility of drawing clear lines between "necessities" and "luxuries." It stressed the economic distortions and the heavy compliance costs, especially for small shopkeepers, of a complex VAT structure. ^{2/} Thus European experience teaches the advantages of a single rate VAT, or at least a very simplified rate structure.

^{1/} Sijbren Cnossen, "The Netherlands," in VAT Experiences of Some European Countries, edited by Henry J. Aaron (Kluwer, 1982).

^{2/} Cedric Sandford, "Irish Commission Seeks Overhaul of Indirect Taxes," Accountancy, Vol. 95 (September 1984), pp. 83-84.

Policy makers in developing countries are aware of the European experience. Nevertheless, in an effort to mitigate regressivity some developing countries have adopted VATs with more than one rate. In some instances, a VAT originally enacted with a single rate was later transformed into a multiple rate VAT. ^{1/}

Developing countries with multiple rate VATs tend to obtain a smaller fraction of their VAT receipts from their higher rates than estimates of the tax base would suggest. This is particularly true when the high rates apply to luxury goods, where the temptation to evade is high. A workable compromise between the preference of administrators for a single rate and the desire to decrease the regressivity of the tax is to supplement a VAT with selective consumption taxes that apply only at the import-manufacturing level. Enforcement is facilitated by confining the multiple rates to a small number of taxpayers, while still taxing selected goods at higher than standard rates. No credit is given against the VAT for the selective consumption taxes paid at the import-manufacturing level. This method has been used in Chile, Costa Rica, and Peru, among others.

(2) Level of VAT rates

The level of the standard VAT rate is a recurring topic of discussion in developing countries. Some businessmen and tax administrators claim that standard rates of 18 to 20 percent are unenforceable in developing countries. They argue that high VAT rates provide such strong incentives for evasion that the scant administrative resources available in developing countries cannot cope with enforcement. Some critics say that high rates tend to distort resource allocation because they help inefficient enterprises to continue operating by charging VAT on their sales and failing to pay the tax to the government. It is even argued that it would be more practical to repeal VAT and return to some form of cascade-type turnover tax because such a tax has the potential for providing abundant revenues with much lower rates.

These arguments have been pressed in several developing countries (including some with lower rates than 18 to 20 percent), but to my knowledge only one, Peru, has embraced them. In 1984, Peru reduced the standard VAT rate from 18 to 11 percent and early in 1986 reduced it again to 6 percent. The rate reduction was said to be motivated

^{1/} In Mexico, for example, VAT was introduced in 1980 with a single 10 percent rate. In 1983 the standard rate was increased to 15 percent and two special rates were introduced (6 and 20 percent).

by a desire to improve compliance and remove one of the causes for the rapid growth of the underground economy. ^{1/} Too little time has elapsed to judge whether these objectives have been attained.

Opponents of the idea that high VAT rates are unenforceable in developing countries usually reply with the following arguments. First, some developing countries such as Brazil and Chile have had considerable success in implementing a VAT with standard rates that are in the neighborhood of 18 or 20 per cent. Second, in developing countries a substantial proportion of VAT revenues is collected at the import stage and, of the remainder, a large fraction is collected from relatively few enterprises. In these circumstances there is little scope for improving compliance and revenue performance in the short-term through reductions in the standard VAT rate. Such reductions would almost certainly result in an immediate revenue loss.

Experience shows that neither high nor low VAT rates are enforceable in developing countries without effective administration. Scarce administrative resources must be aimed at carefully chosen objectives to ensure an appropriate compliance level, especially when the standard rate is raised because of short-term revenue needs. Unless the administration is able to act quickly and effectively, the revenue results of such increases may prove disappointing, because even large enterprises may fail to pay the tax if they are experiencing financial difficulties owing to a general economic downturn.

b. Exemptions and zero rating

Exemptions of particular commodities complicate the administration of a VAT. Additional record-keeping is required to segregate taxable from exempt sales and in practice the distinction between what is exempt and what is taxed is often tenuous or arbitrary. Normal exemptions, where there is no right to a refund of the prior stage tax borne on inputs of goods and services, are less difficult to administer than full exemptions (or "zero rating"), which carry the right to a refund of prior stage tax paid on purchases of goods and services.

The fact that exemptions complicate VAT administration has not deterred developing countries from exempting basic and non-basic commodities. Distributional objectives have prevailed in this case over administrative concerns. But administrative considerations have dominated in the area of zero rating. Because this type of exemption increases the number of VAT refunds, most developing countries have

^{1/} An unpublished study by Peru's Ministry of Labor reported that in 1983 30 percent of Lima's active population was working in the "informal economy."

restricted it to exports--wisely, because tax administrations in such countries are ill-equipped to handle refunds, either of VAT or of other taxes. Adding to the number of refunds would divert administrative resources from enforcement of the VAT.

Ease of administration requires that exemptions be kept to a minimum. Where exemptions have been almost entirely eliminated (as in Chile) VAT has been much easier to administer and therefore quite successful. In most developing countries, however, administrators must contend at least with exemptions of essential commodities. While there is a distributional case for exempting certain basic commodities, it is difficult to justify the exemption of particular regions or industrial activities from VAT. The administrative complexities created by such exemptions suggest that developing countries would be well advised to refrain from introducing them.

c. Treatment of small enterprises

The need to provide special treatment for small businesses under a VAT is much more pressing in developing than in industrial countries. Small traders are usually more numerous in developing countries, literacy is lower, and business methods less sophisticated. If small taxpayers in developing countries suddenly had to comply with the normal requirements of a VAT, they would be unable to cope. In addition, the tax administration would be overwhelmed by taxpayers who would contribute little to total VAT revenues.

A number of different expedients for dealing with small enterprises have been implemented in developing countries. One method is to exempt all taxpayers whose yearly turnover is under a certain limit (e.g., Costa Rica). Another is to subject taxpayers whose sales are below a certain limit to a turnover tax in lieu of VAT (e.g., Korea). Some countries opt for applying a lump sum tax, which may be graduated according to turnover, to taxpayers whose yearly sales are under a certain limit (e.g., Mexico). In some countries taxpayers may deduct taxes paid on their inputs from the lump sum or the special turnover tax (e.g., Chile and Korea). Another method for dealing with small taxpayers is to require their suppliers to add a notional tax to the price they charge, in lieu of the VAT that the small enterprises would otherwise be required to pay (e.g., Argentina). Other countries apply methods that are hybrids of these, e.g., exempting very small taxpayers and applying a simplified system to slightly larger ones.

All methods used to deal with small taxpayers are arbitrary because they can only approximate the merchant's true liability if the value-added mechanism were accurately applied. Efforts to refine these methods usually introduce complications that defeat the objective of easing administration and increase the costs borne by small taxpayers. The experience of developing countries shows that, in practice, none of the methods in use is wholly satisfactory. One of the main difficulties for the tax administration is to verify the gross sales of an enterprise that claims special treatment, since this is the usual criterion by which special treatment is conceded to small traders.

The chief objective of any special system for small taxpayers should be to increase gradually the number of taxpayers subject to the standard system. This increase should come about as the administration acquires greater experience with VAT and taxpayers become accustomed to complying with basic recording and bookkeeping requirements. One way to include more taxpayers in the standard system is to freeze the level of the turnover limit below which taxpayers receive special treatment, as has been done in Costa Rica. Another is to make the special treatment more onerous than the regular VAT system, as in Chile. However, caution should be exercised in adopting procedures that increase the number of regular VAT taxpayers, since the absorptive capacity of the tax administration itself is limited.

To sum up, the experience of developing countries shows that a variety of methods for dealing with small taxpayers is in use and all methods present technical and practical problems. Most developing countries have abandoned the search for truly equitable solutions for small taxpayers and have turned their attention to ways of pulling into the regular system those taxpayers masquerading as "small" who actually are not. In some countries the special method for small taxpayers has in practice been virtually abandoned, either because it imposes a heavier tax than the regular system (Chile), because it is too complicated to administer (Peru), or because taxpayers are not complying with it (Argentina). ^{1/} From the point of view of tax administration, the best method of dealing with small taxpayers may be to exempt the truly small ones and require all others to comply with the regular VAT system. Less sophisticated taxpayers should be allowed to keep simplified records and perhaps to pay the tax bimonthly or quarterly, but otherwise be subject to the normal system.

^{1/} The Argentine system requires suppliers to apply a surcharge to unregistered traders, in lieu of their VAT payments. To avoid this surcharge most small traders have registered, although few of them actually file VAT returns.

3. Introduction of a VAT

The experience of developing countries that have implemented a VAT ought to be instructive for those developing countries now considering this tax. It is difficult, however, to offer general guidance. The problems of introducing a VAT depend in large measure on whether the country has had previous experience with general sales taxes, the nature of the taxes that the VAT will replace, the effectiveness of tax administration, the lead-in time, and how the VAT is structured in terms of rates, exemptions, and treatment of small taxpayers.

a. Publicity and taxpayer information

When VAT replaces a sales tax that extends through the retail stage, preparations for implementing it are much less complicated than in countries where no sales tax existed previously, or where the retail sector was excluded from a sales tax. There is also less taxpayer resistance to VAT when a sales tax has been in place, since taxpayers are already accustomed to complying with certain basic bookkeeping and filing requirements. Even in these favorable circumstances, however, it is important that taxpayers fully understand that the VAT rate will apply only on their value added. Otherwise the marked rate increases that usually accompany a changeover from a turnover to a value-added tax will cause taxpayer resistance and compliance problems. Ignorance among consumers about VAT may lead the public to accept without question price increases falsely attributed to VAT. These comments suggest that an important requirement for the successful introduction of a VAT is an adequate publicity campaign, aimed at both taxpayers and consumers. Where such efforts have been made, as they were in Argentina, Korea, and Mexico, for example, the VAT has been introduced without great difficulty.

b. Lead-in time

Enough lead-in time should be allowed to permit careful preparation of regulations, return forms, and systems for registering taxpayers and processing VAT returns and payments. Here again, previous experience with a general sales tax through the retail level makes an important difference; Chile was able to reduce the lead time to a few months because of prior experience with a turnover tax.

c. Organizational issues

Major decisions that must be taken before introducing a VAT concern the choice of organization to administer the tax and the organizational changes required by the introduction of VAT. Nearly all developing

countries that apply a VAT through the retail stage have assigned its administration to the same organization that administers income taxation, ^{1/} which usually also administered the taxes that the VAT replaced.

Some developing countries have considered establishing a separate organization to administer VAT. Among the reasons given for doing so was the "modern" nature of the tax, which would make it difficult to administer by the existing conventional (and somewhat antiquated) methods. In Portugal, for example, the authorities considered assigning their VAT to a new tax agency that would perform all the administrative functions connected with the tax, including collection, processing of returns, and enforcement. They were attracted by the opportunity of eliminating the rigidities caused by the separation of assessment, collection, and data processing of other taxes among three different agencies. In the event, they decided to assign the administration of VAT to the department in charge of income taxes, primarily because of the advantage to be gained from closely integrating VAT and income tax administration. Such integration facilitates the efficient use of all official documents and information relating to a given taxpayer and his business connections. It also allows for better planning and coordination of enforcement efforts for both VAT and income taxes and makes use of current tax audit expertise.

The organizational changes that are required by the introduction of a VAT will differ from country to country. Where the tax department is organized along functional lines, consistent with current precepts, and a general sales tax was previously in force, no major changes are necessary. If the department is not organized by function, a special VAT unit must usually be established. Still, it would be preferable to integrate VAT administration within a functionally organized tax department. Responsibility for VAT collection should be assigned to the same units that collect other taxes, VAT audit to the units that audit other taxes, and so on, in order to effectively coordinate administration of the VAT with that of other taxes.

d. Staffing requirements and training

Other matters that must be considered before VAT is implemented are staffing requirements and staff training. There is little information available regarding the exact number of additional staff that have been

^{1/} Exceptions include Brazil, where the VAT that extends through the retail stage (ICM) is a state tax, and Mexico, where administration of VAT is shared by the federal and state governments.

required to implement a VAT in developing countries. In countries where a sales tax extending through the retail stage existed prior to VAT, tax administrations have generally assigned the same staff to administer the VAT.

It must be kept in mind that in most developing countries VAT is by no means a "mass" tax. Exemption levels that eliminate many small traders from the scope of the tax and highly selective taxation of services keep the number of VAT taxpayers low. Table 2 shows that the ratio of VAT taxpayers to population tends to be smaller in developing than in industrial countries. Because coverage of the tax is so limited, most administrations of developing countries have not needed substantial additional staff to implement a VAT.

All of them, however, have had to train their staff to administer the tax. Given the resource constraints faced by tax administrations in developing countries, most of them have conducted adequate training programs. Where training has been inadequate, taxpayer resistance to the tax has tended to increase.

e. Miscellaneous problems

The introduction of a VAT through the retail stage has been accomplished without great disruptions in most developing countries. Problems have sometimes appeared in unexpected places as, for example, in the collection of VAT upon imports. Because the primary responsibility for administering the tax has been given to the department in charge of internal taxes, customs officials have not always been fully informed about their responsibilities. Where small enterprises have been subject to new invoicing or bookkeeping requirements, they have protested vigorously and have increased general resistance to the tax. Finally, in countries where important features of the new tax, such as the rate, were not settled until the last moment, resistance against VAT was accentuated.

4. Main issues of VAT administration

Identifying taxpayers, processing returns, controlling collections, making refunds, auditing taxpayers, and levying penalties are the main tasks that must be performed by the organization in charge of VAT. Taxpayers must comply with invoicing and bookkeeping requirements in addition to filing returns and paying the tax. How administrations perform their duties in developing countries and how taxpayer requirements differ from those in industrial countries will be described below.

Table 2. Number of VAT Taxpayers as Percentage of Population
in Selected Industrial and Developing Countries 1/

Country	Number of VAT Taxpayers				Taxpayers as percentage of Population
	Regular	Simplified	Forfait	Total	
	System				
(in thousands)					
<hr/>					
<u>Industrial</u>					
Belgium	381	111	64	556	5.63
France	686	963	786	2,435	4.45
Ireland	95	--	--	95	2.69
Italy	4,087	225	289	4,601	8.17
Netherlands	468	--	--	468	3.26
United Kingdom	1,355	--	--	1,355	2.42
 <u>Developing</u>					
Argentina	514	--	--	514	1.79
Chile	395	4	--	399	3.42
Colombia	46	53	--	99	0.36
Ecuador	22	n.a.	--	22	0.27
Haiti	0.5	--	--	0.5	0.01
Korea	289	879	--	1,168	2.92
Panama	7	--	--	7	0.36
Peru	13	n.a.	--	13	0.07
Uruguay	28	22	--	50	1.68

Source: Tax data from revenue departments of each country. Population data from World Bank Atlas, 1985.

1/ Data for Chile, Ecuador, Panama, and Peru are for the year 1983. Data for Argentina, Belgium, and Uruguay are for 1984. Data for other countries are for 1985.

a. Taxpayer identification

Developing countries have approached registration for VAT in a variety of ways. In countries in which a sales tax through the retail stage was in force before VAT, taxpayers usually were not required to register again and continued to use their old identification numbers. In countries where the previous sales tax did not extend to the retail stage, all taxpayers have been required to register for VAT.

A number of developing countries have made efforts over the last two decades to establish a single taxpayer master file, based on a unique identification number for each taxpayer that would be used in administering all taxes. In some countries these efforts have been successful and VAT taxpayers use the number for both VAT and other taxes. In other countries different numbers are used for different taxes. For more effective tax administration it would be advisable to use a single identification number for all taxes.

In some developing countries the VAT register is practically useless. The number of VAT registrations greatly exceeds the number of taxpayers who actually file VAT returns. Misguided registration campaigns have encouraged thousands of persons to register who are not liable for VAT. In other instances, taxpayers have registered in order to avoid the tax that applies to unregistered taxpayers in lieu of VAT. Taxpayers tend to register freely because they are aware that the administration has limited resources for checking compliance with filing requirements. In practice, most developing countries have built up a file of "active" taxpayers, which are those that have filed a VAT return at least once. This is the file that the tax administration uses for detecting non-filers. Because of its importance, efforts should be made to keep this file as current as possible.

b. Invoicing and bookkeeping requirements

Bookkeeping requirements for regular VAT taxpayers are basically similar in developing and industrial countries. There is a major difference, however, in invoicing requirements. All industrial countries require invoices to be issued in transactions between VAT taxpayers that show the amount of tax paid, but most do not require VAT taxpayers to issue documentation to final consumers except for sales of services. Most developing countries, by contrast, require some form of invoicing for all transactions on which VAT is charged, including sales to final consumers. For such sales, taxpayers are usually allowed to use a simplified form of invoice or to issue a cash register receipt.

Requiring vendors to give invoices to final consumers adds to VAT compliance costs, particularly among smaller enterprises. Even though this requirement is highly unpopular, most tax authorities in developing countries believe that it is essential for VAT enforcement. A considerable amount of administrative resources are currently devoted to checking the issuance of invoices to final consumers and substantial penalties apply to traders who do not comply with this requirement. In Chile and Peru, for example, VAT legislation empowers authorities to temporarily close businesses belonging to offending traders.

To encourage consumers to request invoices, a few Latin American governments hold lotteries in which invoices are the tickets. The Turkish government makes payments to consumers based on the volume of purchases they can document with invoices.

Those who believe that traders should be required to issue invoices to final consumers maintain that this requirement makes it more difficult for retailers to understate their sales. This in turn gives them an incentive to demand invoices from their suppliers. As a result, compliance levels of both retailers and their suppliers are enhanced.

Opposition to requiring invoices is based primarily on the increment it adds to compliance costs. Opponents also argue that VAT audits should be aimed primarily at manufacturers and other suppliers. Using information obtained from the input side, it should be possible to audit retailers effectively. In this debate, consumer attitudes are also cited. A recent survey in a Latin American country shows that the public tends to regard the invoice as a bargaining tool. If a retailer reduces the price, the buyer may not demand an invoice or may accept one showing a lower price than that actually paid.

Some developing countries require all retailers to use cash registers. It must be noted, however, that these machines are not immune to tampering. In family-operated enterprises, for example, cash register records do not provide a reliable check upon gross sales.

c. Filing and payment requirements

There are considerable differences among developing countries in VAT filing and payment requirements and how they are enforced. Some aspects of these requirements will be discussed here.

(1) Filing and payment periods

In some developing countries, e.g., Argentina, Mexico, and Peru, regular VAT taxpayers are required to file yearly returns but must make provisional monthly payments. Most countries, however,

require monthly filing and payment of VAT and do not require taxpayers to furnish a yearly return. Experience shows that the yearly return does not seem to add to the effectiveness of VAT administration because most administrations lack the resources to match the provisional monthly payments with it.

(2) Collection lags

When VAT was initially introduced in developing countries, collection lags of 45 to 60 days were not unusual. In times of high inflation such collection lags were costly to the government. As a result, most developing countries have shortened VAT collection lags appreciably. Regular taxpayers are now usually required to pay VAT each month on sales made the previous month. Occasionally, when very high rates of inflation prevailed, large VAT taxpayers have been required to make semi-monthly payments. Bimonthly payment periods or collection lags longer than 20 to 25 days are exceptional.

(3) Control of filing and payment

Several developing countries that impose a VAT make some use of computers for administering the tax. In such countries the taxpayer register is usually maintained in the computer and VAT returns are processed by machine. Few developing countries, however, use computers effectively to detect taxpayers that stop filing VAT returns. Even in countries with considerable computer capacity and systems expertise, control of non-filers is currently being done manually. This means that taxpayers who stop filing are only detected after long delays, putting in jeopardy collection of the delinquent taxes. To solve this problem, some countries have established effective manual systems for controlling large VAT taxpayers' compliance with filing and payment requirements. Rankings of VAT taxpayers by size of their payments are available only in a few developing countries. Where they exist, they usually show that a few large taxpayers account for a considerable fraction of VAT collections on domestic transactions (e.g., 5 percent account for more than 80 percent of such collections). In these circumstances, the decision to have a special system for large taxpayers is sound and has in practice produced excellent revenue results.

(4) Statistical information

Although several developing countries use computers for processing VAT returns, it is remarkable how little meaningful VAT statistical information is available in most of them. Authorities need to be told how useful tabulations of taxable sales and credits by activity and by volume of sales are for enforcing the tax and for economic analysis.

d. Audit of VAT

The initial literature on VAT tended to minimize administrative difficulties by emphasizing the "built-in" checking mechanism of the tax. Some administrators, however, expressed doubts concerning the effectiveness of this feature. 1/ Such doubts have been confirmed by experience in both industrial and developing countries.

Few serious attempts to quantify VAT evasion have been made in developing countries and most of these studies are unpublished. Periodically, officials refer to VAT evasion levels of 30, 40, or even 50 percent. While these assertions are sometimes based on sketchy evidence, the overall impression is that considerable evasion of VAT exists in developing countries. 2/

Methods used to evade VAT include, among others, underreporting of sales, abuse of the credit mechanism (which may involve the use of falsified invoices), and fraudulent refund claims. Some comments regarding the ways in which developing countries attempt to cope with evasion of VAT are made below.

(1) Selection of cases for audit

Most developing countries that impose a VAT initially intended to develop procedures for comparing data on purchases and sales by various taxpayers. It was hoped that such cross-checking would provide an effective tool for selecting VAT taxpayers for audit and thus improve audit results. Tax administrations with data processing facilities planned to use them for massive cross-checking operations. Smaller administrations expected to accomplish the task manually and more selectively.

In practice, most developing countries have not implemented massive cross-checking schemes; Korea is an important exception. Practical difficulties and resource constraints have prevented them from doing so. Enthusiasm has been tempered by the realization that cross-checking of invoices will not detect sales where no invoice is issued or where underinvoicing takes place. Selective checks of invoices, particularly

1/ See George E. Lent, Milka Casanegra, and Michèle Guerard, "The Value-Added Tax in Developing Countries," Staff Papers, International Monetary Fund, Vol. 20 (1973), pp. 350-52.

2/ Cf. Antonio Pedone, "Italy," in VAT Experiences of Some European Countries, edited by Henry J. Aaron (Kluwer, 1982). Pedone cites evasion levels of 40-60 percent in Italy, depending on the measure used.

to ascertain whether credits against the VAT liability are supported by bona fide invoices rather than falsified documents, have proved useful for detecting taxpayers that merit further investigation. Where information is available about ratios of gross sales to credits by sector, authorities can focus upon taxpayers whose ratios deviate significantly from the norm. Import data provided by the customs department can be used to select taxpayers for audit. Checking the lists of suppliers to government enterprises is also effective: in several developing countries under-payments of VAT have been discovered among firms that sell to the government. Some vendors seem to think that government enterprises will not be audited and therefore no attempt will be made to check suppliers to government.

Some developing countries have not yet developed audit selection methods appropriate for VAT. A major improvement in enforcement would result from better selection of audit cases, because the scarce administrative resources available could be employed more effectively.

(2) Nature of VAT audit

VAT audit programs should be designed to distribute available audit resources among large numbers of taxpayers. This objective cannot be achieved if tax auditors attempt to use traditional audit methods and make an exhaustive check in each case. Developing countries that have enforced VAT most successfully have opted for audit methods that call for checking a few selected items among as large a number of taxpayers as possible. In order to apply this method successfully, however, there must be in place an effective audit selection system and the auditor must have more information than just that included in the return, e.g., about imports.

(3) Other enforcement methods

In addition to examining taxpayers' records, several countries enforce control of VAT by checking inventories of goods on hand and inspecting merchandise in shops, warehouses, storerooms, and other business premises. Truckers transporting goods are required to carry consecutively numbered manifests corresponding to invoices. These manifests describe what is being carried and give the names and addresses, with registered numbers, of the buyers and sellers. Such methods have proved highly effective in those developing countries that apply them.

e. Refunds

The administration of VAT refunds is a persistent problem in developing countries. In most such countries, there is a legal and administrative framework that makes officials reluctant to give tax refunds. Practically all developing countries give refunds to exporters, but some require other VAT taxpayers to carry forward their excess credits indefinitely (in some countries these credits are indexed for inflation). In other countries all VAT taxpayers are legally entitled to a refund if they have an excess credit. In practice, however, taxpayers other than exporters prefer to carry forward the credit than to comply with the often tortuous procedures required to obtain a refund.

To the extent that excess credits stem from sizable purchases of capital goods, the difficulty in obtaining refunds erodes the value of the capital-goods exemption that is the hallmark of the consumption type of VAT that most developing countries have adopted. ^{1/} Unless there are major breakthroughs in current legal and administrative traditions, however, this problem will persist.

As regards refunds to exporters, developing countries have some of the same problems as industrial countries. Evidence of abuse and fraud is widespread. Authorities must choose between unattractive alternatives. On the one hand, conducting too intensive a check before issuing a refund will impair the competitive position of the exporter. On the other hand, if export refunds are unchecked, serious abuses may escape detection. Probably the best solution is a rapid check of all export refunds coupled with random in-depth audits.

f. Penalties

The penalties in the law for violations of VAT differ from country to country. In some developing countries taxpayers who evade VAT may be sent to prison. Certain offenses may be punished with a temporary shutdown of the taxpayer's business premises. Practically all countries levy fines for failure to register and to file on time.

In practice, most developing countries find it difficult to impose stringent penalties for tax evasion. Penalties for evading VAT are no exception. The stricter penalties in VAT laws are usually not applied and consequently have little deterrent effect. The problem here is not technical in nature but related instead to general attitudes toward tax compliance and enforcement.

^{1/} Features of an income type of VAT have been introduced into the taxes of Argentina and Peru. The tax paid on capital purchases is deductible in installments over a fixed number of years: 3 in Argentina, 4 in Peru.

g. Costs of VAT administration

Little information is available on the costs of administering VAT in developing countries. Fragmentary data, supplemented by the impressions of administrators, suggest that the cost of administering a VAT in these countries usually ranges between 1 and 2 percent of collections. This is not much different from the costs of collection in industrial countries.

It would be well to reflect that low collection costs may not imply efficiency but indicate instead that important functions are being neglected. In the case of VAT, for example, low collection costs may mean that the administration is concentrating exclusively on the largest taxpayers and neglecting the others.

5. Conclusions

Administrative considerations have exerted considerable influence on the structure of VAT in developing countries. Because a single rate VAT is easier to administer than a multiple rate VAT, several developing countries have opted for the former. The complexity of administering full exemptions (zero rating) has led most developing countries to restrict them to exports. Small taxpayers have been dealt with by exempting those with gross sales below a certain threshold or by taxing them under a simplified system. Because of the difficulty of taxing services, most developing countries impose VAT only on selected services. Once VAT is in place, administrative constraints tend to distort some of its features. An insufficiency of resources leads administrations to overemphasize enforcement efforts among large taxpayers, with detrimental effects on compliance among other taxpayers. Restrictive refund practices tend to distort the character of consumption-type VATs.

These remarks are not intended to be critical of tax administrations in developing countries that impose a VAT, nor do they imply that VAT is not appropriate for such countries. My sole purpose is to point out that the broad-based and neutral tax discussed in public finance treatises is very different from the VAT that prevails in most developing countries, and that it is mainly administrative constraints that cause this difference. Experience with VAT shows, once more, that in developing countries tax administration is tax policy.